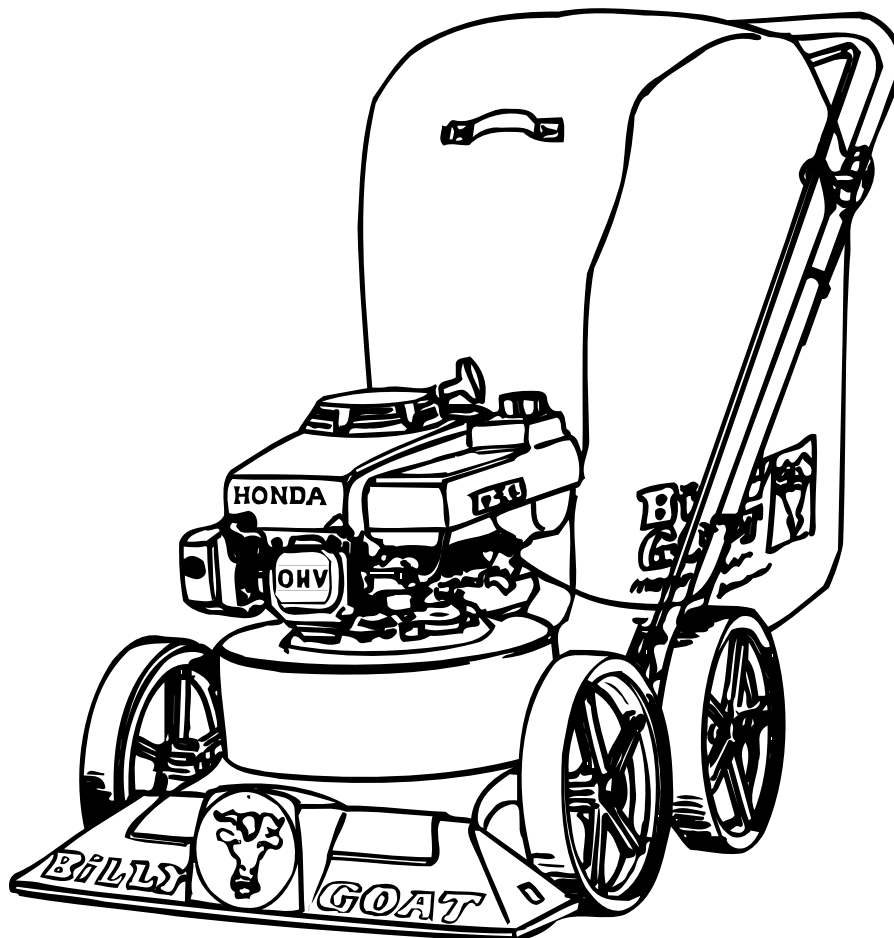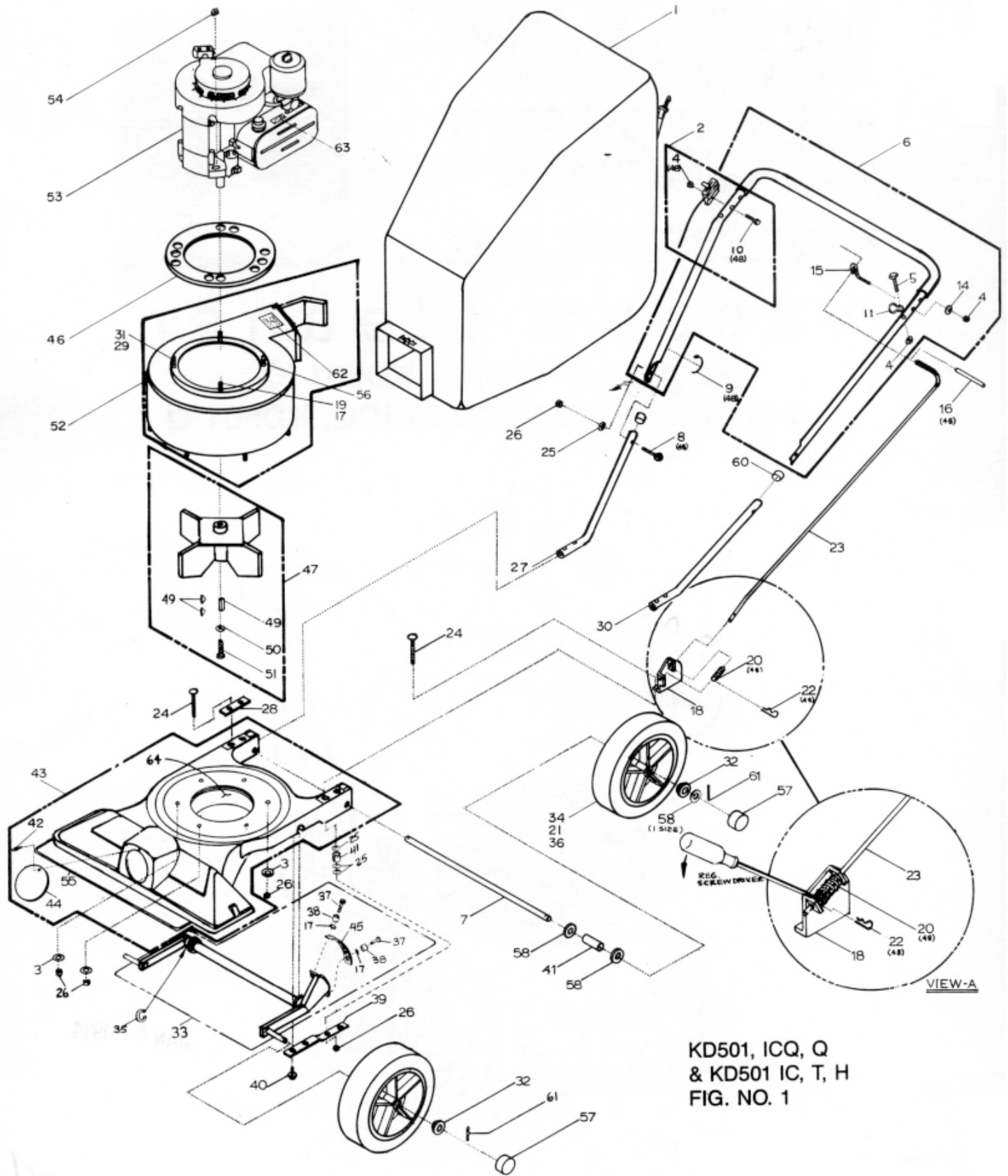# BiLLY GOAT

INDUSTRIES, INC.

vacuum cleaner

Models No. KD501, KD501 IC
KD501 T, KD501 H, KD501 ICQ, KD501 Q

OWNER'S MANUAL

KD501, ICQ, Q
& KD501 IC, T, H
FIG. NO. 1

item no.	PARTS LIST	KD501IC Part No.	QTY	KD501T Part No.	QTY	KD501H Part No.	QTY	KD501ICQ Part No.	QTY	KD501Q Part No.	QTY
1	BAG FELT	900803	1	900803	1	900803	1	900803	1	900803	1
2	THROTTLE ASSEMBLY (INC. (2) of 4, 5, 11)	810135	1	810135	1	810135	1	810135	1	810135	1
3	WASHER-FLAT FENDER	8172020	6	8172020	6	8172020	6	8172020	6	8172020	6
4	LOCKNUT 1/4-20	8160001	3	8160001	4	8160001	4	8160001	3	8160001	3
5	SCREWCAP 1/4-20 x 1 1/2	8041008	2	8041008	2	8041008	2	8041008	2	8041008	2
6	HANDLE ASSY (INC. (2) OF 4,5,11) ((1) OF 15,4,14)	900910	1	900910	1	900910	1	900910	1	900910	1
7	AXLE REAR PUSH	900925	1	900925	1	900925	1	900925	1	900925	1
8	SCREWCAP 5/16-18 x 1 1/2	8041030	2	8041030	2	8041030	2	8041030	2	8041030	2
9	TY WRAP	-	-	900407	2	900407	2	-	-	-	-
10	SCREWCAP 1/4-20 x 1 3/4	8041009	1	8041009	1	8041009	1	8041009	1	8041009	1
11	ROD BAG LOOP	800178	2	800178	2	800178	2	800178	2	800178	2
12											
13											
14	WASHER FLAT CUT 1/4	8171002	1	8171002	1	8171002	1	8171002	1	8171002	1
15	BOLT EYE 90	900913	1	900913	1	900913	1	900913	1	900913	1
16	GRIP	900937	1	900937	1	900937	1	900937	1	900937	1
17	WASHER LOCK EXT 5/16	8181008	2	8181008	2	8181008	2	8181008	2	8181008	2
18	BRACKET HT. ADJ.	900932	1	900932	1	900932	1	900932	1	900932	1
19	SCREWCAP 8 MM x 35 MM	-	-	-	-	-	-	-	-	-	-
	SCREWCAP 5/16-24 x 1"	-	-	-	-	400164	1	-	-	-	-
20	SPRING	900136	1	900136	1	900136	1	900136	1	900136	1
21	TIRE ONLY	900507	1	900507	1	900507	1	900507	1	900507	1
22	PIN HAIR COTTER	900471	1	900471	1	900471	1	900471	1	900471	1
23	ROD HT. ADJ. PLUNGER	900978	1	900978	1	900978	1	900978	1	900978	1
24	BOLT CARRAIGE 5/16-18 x 3 1/2	8024050	4	8024050	4	8024050	4	8024050	4	8024050	4
25	WASHER FLAT 5/16	8172008	14	8172008	14	8172008	14	8172008	14	8172008	14
26	WASHER 5/16 SAE	8160002	12	8160002	12	8160002	12	8160002	12	8160002	12
27	HANDLE STUB RH ASSY	900911	1	900911	1	900911	1	900911	1	900911	1
28	PLATE HANDLE SUPPORT	900933	1	900933	1	900933	1	900933	1	900933	1
29	WASHER LOCK 5/16	-	-	8177011							
30	HANDLE STUB LH ASSY	900912	1	900912	1	900912	1	900912	1	900912	1
31	SCREWCAP 5/16-18 x 3/4	-	-	8041026	1	-	-	-	-	-	-
	SCREWCAP 5/16-18 x 2 1/2	-	-	-	-	-	-	8041034	1	8041034	1
32	WASHER HUB CAP	900927	4	900927	4	900927	4	900927	4	900927	4
33	AXLE FRONT MECH ASSY	900749	1	900749	1	900749	1	900749	1	900749	1
34	WHEEL ASSY CAST	900509	4	900509	4	900509	4	900509	4	900509	4
35	WASHER 0.75" "C"	900997	0-1	900997	0-1	900997	0-1	900997	0-1	900997	0-1
36	BEARING ONLY	900498	2	900498	2	900498	2	900498	2	900498	2
37	SCREWCAP 5/16-18 x 1"	8041028	2	8041028	2	8041028	2	8041028	2	8041028	2
38	SPACER	900746	2	900746	2	900746	2	900746	2	900746	2
39	PLATE BRACE REAR	900905	2	900905	2	900905	2	900905	2	900905	2
40	SCREWCAP 1/4-20 x 1/2	8041002	4	8041002	4	8041002	4	8041002	4	8041002	4
41	SPACER	900926	6	900926	6	900926	6	900926	6	900926	6
42	SCREW SELF TAPPING	8123086	1	8123086	1	8123086	1	8123086	1	8123086	1
43	NOXZZLE MAIN FRAME ASSY (INC. (1) OF 44,42,55)	900931	1	900931	1	900931	1	900931	1	900931	1
44	PLUG	900146	1	900146	1	900146	1	900146	1	900146	1
45	PLATE QUAD ADJUSTABLE	900746	1	900746	1	900746	1	900746	1	900746	1
46	GASKET	800411	1	800411	1	-	-	800411	1	800411	1
47	IMPELLER ASSY (INC. 49,50,51)	800988	1	800097-S	1	900003-S	1	900215-S	1	900215-S	1
48	PARTS BAG ASSY	900917	1	900917	1	900917	1	900917	1	900917	1
49	KEY 1/4 SQ. x 2 1/4	9201123	1	9201123	1	-	-	-	-	-	-
	KEY HI PRO 5/32 x 5/8	-	-	-	-	900162	1	900162	2	900162	2
50	WASHER LOCK 3/8 TWIST TOOTH	400502	1	400502	1	400502	1	400502	1	400502	1
51	SCREWCAP 3/8-24 x 1" GR. 8	900154	1	900154	1	900154	1	900154	1	900154	1
52	HOUSING ASSY (INC. 62)	900909	1	900909	1	900909	1	900909	1	900909	1
53	ENGINE	900500	1	900166T	1	900615	1	900273	1	900622	1
54	NUT LOCK 5/16-18	8160002	4	8160002	4	8160002	4	8160002	4	8160002	4
55	ROD BUMPER	900939	1	900939	1	900939	1	900939	1	900939	1
56	SCREWCAP 5/16-18 x 1 1/4	8041029	4	8041029	3	-	-	8041029	2	8041029	2
	SCREWCAP 5/16-18 x 1 1/2	-	-	-	-	8041030	2	-	-	-	-
57	CAP HUB	900486	4	900486	4	900486	4	900486	4	900486	4
58	WASHER 1/2" SAE	8172011	5	8172011	5	8172011	5	8172011	5	8172011	5
59											
60	CAP END 1"	800392	2	800392	2	800392	2	800392	2	800392	2
61	PIN COTTER 3/32 x 3/4	8197016	4	8197016	4	8197016	4	8197016	4	8197016	4
62	LABEL CAUTION HANDS AND FEET	900326	1	900326	1	900326	1	900326	1	900326	1
63	LABEL CAUTION HOT ENGINE	400268	1	400268	1	400268	1	400268	1	400268	1
64	GUARD FOAM INSERT	900977	1	900977	1	900977	1	900977	1	900977	1

SAFETY PRECAUTIONS

Like all mechanical tools, reasonable care must be used when operating the machine. Read all instructions!

1. Disconnect spark plug wire before servicing
2. Do not put gas in tank when hot or in an enclosed area.
3. Do not start engine or operate with bag or guards removed.
4. Keeps hands and feet clear of ALL inlet and discharge openings.
5. Do not operate with hose cap, bag, or hose removed.
6. Do not operate during excessive vibration!
7. Follow engine manufacturer operating and maintenance instructions.
8. Inspect machine and work area before starting unit.
9. Installation of debris bag- Make sure strap is tight and well secured.
10. Be sure zipper is closed before starting engine.

DUST IS THE GREATEST CAUSE OF LOST VACUUM! SHAKE BAG WELL AFTER EACH EMPTYING. RUN ENGINE AT HALF THROTTLE FOR FIRST HALF HOUR TO CONDITION NEW

MAINTENANCE

1. ENGINE: See engine manufacturer instructions.
2. Inspect machine before starting unit.
3. Maximum vacuum: Maintain by emptying bag before it fills completely. Dust will block pores of bag and reduce vacuum. Stop motion and shake bag down without removing or stop machine and remove bag to shake free of dust. You may wash felt bags.

REPLACE SPARK PLUG WIRE, GUARDS, BAG, CAPS AND/OR HOSE BEFORE STARTING ENGINE.

Note: Fuel stabilizer (such as Sta-bil) is an acceptable alternative in minimizing the formation of fuel gum deposits during storage. Add stabilizer to gasoline in fuel tank or storage container. Always follow minutes ratio found on stabilizer to allow it to reach carburetor.

ASSEMBLY

Your Billy Goat is shipped from the factory in one carton, completely assembled except for the debris bag, upper handle and height adjustment rod.

1. READ operator's instructions.

2. ASSEMBLE upper handle securely to lower handle stubs. Insert screws 8 (including throttle screw 5) so that screw heads are on inside of handle. Otherwise premature bag wear can result.

3. ASSEMBLE height adjustment rod 23 through eye bolt 15 on upper handle and through upper flange of height adjustment bracket 18, through spring 20 and through lower flange of height adjustment bracket 18. Insert pin 22 between spring and lower flange of height adjustment bracket.

4. UNFOLD the debris bag 1 and place mouth of bag over debris deflector and onto discharge outlet. Close zipper before starting engine

5. TIGHTEN STRAP SECURELY to hold bag on discharge.

6. ATTACH upper bag hanger straps to 11, located one on each side of upper handle.

PUT OIL IN ENGINE BEFORE OPERATION!

OPERATION

ENGINE: Must have gasoline and oil. See engine manufacturer operating instructions for type and amount. Engine must be level when checking and filling oil and gasoline. Never operate without aircleaner.

SPEED: Controlled by throttle lever on right side of handle. Under normal conditions operate at minimum throttle to accomplish your current cleaning task.

BAG: Do not place on or near hot surface.

VACUUM NOZZLE HEIGHT: This is raised and lowered by pushing slightly down on handle and pulling top left control.

NOZZLE HEIGHT FINE ADJUSTMENT FOR HARD SURFACE USE:
Optimum nozzle height is ½ " (12.7 mm) above ground with engine not running. To adjust height, loosen item 37 screws on quad plate. Prop front of nozzle up to 1"(25.4 mm) above ground. Keeping wheels on ground, retighten item 37 screws. Recheck and fine adjust to obtain ½" at nozzle front. (see fig. 1)